

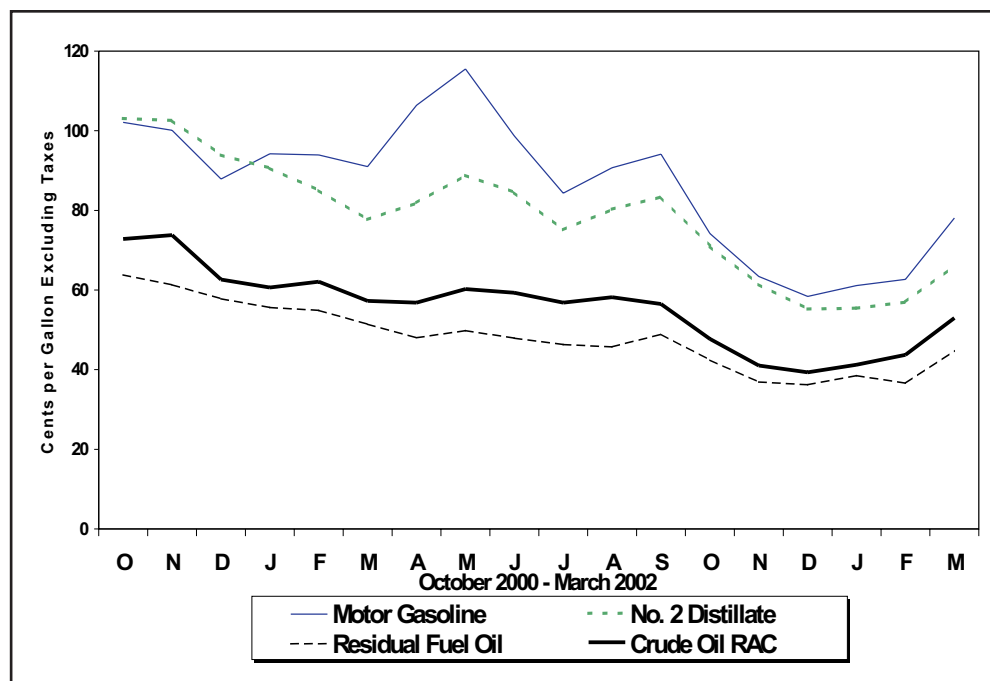
# Highlights

World crude oil prices rose substantially in March, reaching the highest levels seen since last September. Market fundamentals, including indications of a rebound in the U.S. and world economies, and continuing concern over political disturbances in the Middle East encouraged the increase. At the beginning of the month, speculation whether the United States was planning a military attack on Iraq dominated markets, and added a kind of "war premium" to prices. Further, continued and rising violence between Israelis and Palestinians throughout the month exacerbated the war rumors' effect on oil prices. In addition to those political issues, members of the Organization of Petroleum Exporting Countries (OPEC) voted on March 15 to maintain production at existing levels through the end of June. The group has cut production at various times during the past year to keep the average price of its reference basket of 7 crude oil streams within a \$22-\$28-per-barrel range. Notably, some market watchers believe that high oil prices would impede the nascent economic recovery by dampening demand for oil products. By the close of the month, prices for some key streams broke the \$25.00-per-barrel mark, driven by reports of falling stocks of crude oil and refined products—particularly in the U.S.—and other favorable fundamental market elements. Spreading political tensions in the Middle East also provided significant support for rising prices.

In the United States, the atmosphere in the petroleum products marketplace changed markedly during March. Beyond more typical issues like refinery problems and demand rates, world events influenced price

trends in U.S. markets. While crude oil and finished product prices rose appreciably in all major regional markets, gasoline prices saw the greatest degree of change. With the summer "driving season" fast approaching, refiners began to increase output, which in turn helped to draw down crude oil inventories and support prices. In addition to the seasonal demand increase, federal clean air regulations require the use of lower-RVP gasoline during the warm weather months. Refinery inputs are comparatively higher when producing this product since amounts of certain components must be lowered or removed to meet the environmental standards. This process also increases the cost of the final gasoline product. The regulations require suppliers to have a summer grade product at the terminal level by May 1 and at retail outlets by June 1. Adding further pressure on prices, demand for gasoline at the national level has been solid in recent months and remained so again in March. At New York Harbor

**Figure HL1. Crude Oil and Petroleum Product Wholesale Prices**



Sources: Energy Information Administration. Crude oil refiner acquisition cost: Form EIA-14, "Refiners' Monthly Cost Report"; petroleum product prices: Form EIA-782A, "Refiners'/Gas Plant Operators' Monthly Petroleum Product Sales Report."

**Table HL1. U.S. Refiner Prices and Volumes of Petroleum Products**  
(Prices: Cents per Gallon Excluding Taxes, Volumes: Million Gallons per Day)

Products	Sales to End Users						Sales for Resale					
	March 2002		February 2002		March 2001		March 2002		February 2002		March 2001	
	Price	Volume	Price	Volume	Price	Volume	Price	Volume	Price	Volume	Price	Volume
<b>Motor Gasoline</b> .....	87.3	62.8	71.8	64.0	103.8	63.2	78.1	299.8	62.7	293.8	91.0	297.8
<b>Conventional</b> .....	84.3	36.2	69.0	35.4	98.6	36.8	75.5	195.5	59.9	190.1	85.8	195.3
Regular .....	81.4	27.4	65.9	26.6	95.3	27.7	73.9	160.3	58.4	154.7	84.0	158.2
Midgrade .....	90.1	4.8	74.5	4.6	105.3	5.0	79.6	11.5	63.3	11.4	90.0	12.6
Premium .....	97.4	4.0	82.3	4.2	113.3	4.1	84.5	23.7	68.2	24.0	95.0	24.4
<b>Oxygenated</b> .....	89.9	2.6	75.9	4.1	106.7	2.6	82.0	8.8	67.4	10.7	97.4	8.5
Regular .....	87.4	2.1	72.7	3.1	104.5	2.2	80.5	6.9	65.9	8.3	96.0	6.6
Midgrade .....	97.5	0.3	82.3	0.6	112.6	0.3	84.4	1.2	68.0	1.2	97.8	1.1
Premium .....	105.4	0.2	92.0	0.4	122.4	0.2	92.0	0.8	77.8	1.1	109.0	0.7
<b>Reformulated</b> .....	91.4	24.0	75.1	24.4	111.5	23.7	83.2	95.5	67.7	93.0	101.4	94.0
Regular .....	87.8	17.1	71.2	17.3	107.4	16.8	80.6	72.1	64.9	69.0	98.9	69.8
Midgrade .....	97.3	3.4	81.1	3.5	117.8	3.5	90.1	7.9	73.5	7.9	105.5	8.1
Premium .....	103.5	3.5	87.9	3.7	125.1	3.4	92.0	15.5	76.8	16.1	109.9	16.1
<b>Aviation Gasoline</b> .....	124.3	0.1	118.5	0.1	124.5	0.2	102.8	0.7	98.5	0.5	129.3	0.5
<b>Kerosene-Type Jet Fuel</b> .....	64.3	49.2	58.4	45.9	81.1	52.0	64.2	13.9	57.4	13.5	80.5	12.9
<b>Propane (Consumer Grade)</b> .....	39.5	2.7	35.1	2.9	57.6	4.1	39.9	33.9	36.6	38.5	60.1	36.2
<b>Kerosene</b> .....	99.3	0.1	97.7	0.2	112.8	0.2	69.2	1.5	60.9	2.9	83.6	2.2
<b>No. 1 Distillate</b> .....	78.0	0.4	69.4	0.4	89.7	0.4	71.9	1.4	63.0	2.3	90.2	1.1
<b>No. 2 Distillate</b> .....	70.1	23.3	61.6	24.0	84.5	27.9	66.2	117.3	57.0	123.8	77.7	131.6
No. 2 Fuel Oil .....	70.1	2.9	62.3	3.3	86.6	3.5	64.6	27.1	57.7	31.0	76.3	28.5
No. 2 Diesel Fuel .....	70.1	20.4	61.5	20.7	84.2	24.4	66.7	90.2	56.8	92.8	78.1	103.1
Low Sulfur .....	71.9	14.2	63.4	14.1	85.9	17.0	67.0	79.1	57.0	82.1	78.5	88.2
High Sulfur .....	65.9	6.1	57.5	6.6	80.4	7.4	64.1	11.1	54.8	10.7	75.4	14.9
<b>No. 4 Fuel<sup>a</sup></b> .....	59.5	0.4	54.5	0.5	73.1	0.5	60.7	0.1	54.4	0.1	71.2	0.2
<b>Residual Fuel Oil</b> .....	49.5	10.1	43.3	10.9	57.3	16.4	44.8	9.0	36.6	7.9	51.4	10.5
Sulfur Content not > 1 % .....	53.2	2.7	51.2	2.5	66.1	5.5	45.7	5.8	38.0	5.2	57.2	4.0
Sulfur Content > 1 % .....	48.1	7.4	41.0	8.4	52.8	10.9	43.1	3.1	33.7	2.7	47.8	6.5

<sup>a</sup> Includes No. 4 fuel oil and No. 4 diesel fuel.

Notes: Motor gasoline averages and totals prior to October 1993 include leaded gasoline.

Notes: Values shown for the current month are preliminary. Values shown for previous months are revised. Data are final upon publication in the *Petroleum Marketing Annual*.

Source: Energy Information Administration Form EIA-782A, "Refiners'/Gas Plant Operators' Monthly Petroleum Product Sales Report."

the monthly average spot price for regular gasoline increased more than 25 percent from February's level. On the West Coast, gasoline prices experienced a sharp increase at the beginning of the month due in part to reports of refinery problems. The spot price for the regular grade of Cleaner Burning Gasoline (CBG) at Los Angeles opened the month at 67.0 cents per gallon but spiked to 93.0 cents per gallon by March 7. The monthly average price for March was about 33 percent higher than February's average price.

Additional March market and sales activity for crude oil and the principal petroleum products are summarized in the following sections.

## Crude Oil

The daily spot price for West Texas Intermediate (WTI) crude oil at Cushing, Oklahoma showed steady and consistent growth during March, reaching its highest levels since September 2001. After opening at its lowest point, \$21.78 per barrel, the price rose firmly throughout the rest of the month as a variety political and fundamental issues supported higher price levels. By the close of the month, the price had hit its highest point in 6 months, reaching \$26.21 per barrel on March 28, more than \$4 per barrel higher than where it began the month.

- Monthly average crude oil prices for March increased sharply in all categories. The average domestic crude oil first purchase price rose \$3.13 (18.5 percent), to \$20.05 per barrel.
- The average free-on-board (f.o.b.) cost of imported crude oil increased \$3.55 (20.1 percent), to \$21.25 per barrel. The average landed cost of foreign crude oil rose \$2.71 (14.3 percent), to \$21.66 per barrel.
- The average refiner acquisition cost for domestic crude oil climbed \$2.87 (15.3 percent), to \$21.57 per barrel. The average cost of imported crude oil to U.S. refiners jumped \$4.65 (25.6 percent), to \$22.78 per barrel. The composite refiner acquisition cost for crude oil increased \$3.89 (21.2 percent), to \$22.26 per barrel.

## Petroleum Products

### *Motor Gasoline*

Spurred by robust demand, refinery malfunctions, and reports of declining stock levels, the daily spot price for regular gasoline at New York Harbor increased significantly during March. Opening at 56.9 cents per gallon, the price rose aggressively during the first half of month. Refinery outages on the East and Gulf coasts caused the sharp increase in part. The price reached its high of 75.3 cents per gallon on March 18. After a short period of decline, the price returned to an upward track and closed the month at 74.9 cents per gallon, 18 cents higher than where it began March.

- March national average gasoline prices soared above February levels in all sales categories. The average February price for retail sales of motor gasoline by refiners leaped 15.5 cents to 87.3 cents per gallon. The average wholesale price increased 15.4 cents to 78.1 cents per gallon. Including data reported by a sample of motor gasoline marketers, the national average price at company-operated retail outlets jumped 14.6 cents to 87.4 cents per gallon. The average wholesale price climbed 15.0 cents to 78.2 cents per gallon. The average dealer tank wagon (DTW) price rose 13.3 cents to 81.8 cents per gallon, while the average rack price jumped 16.3 cents to 77.7 cents per gallon. The average price for bulk sales increased 11.3 cents to 68.7 cents per gallon. Reformulated gasoline (RFG) prices were 5.6 cents higher than conventional gasoline prices at re-

tail, and 5.9 cents more at wholesale. Oxygenated gasoline prices were 7.6 cents and 7.5 cents higher than conventional gasoline prices at retail and wholesale, respectively.

- In general, refiner sales of gasoline rose in March. Total sales increased 4.8 million gallons per day (1.3 percent), to an average of 362.6 million gallons per day. Retail sales fell 1.2 million gallons per day (1.9 percent), while wholesales increased 6.0 million gallons per day (2.0 percent). Rack sales accounted for 65.0 percent of wholesales, while DTW and bulk sales made up 23.1 percent and 11.8 percent, respectively. Reformulated gasoline accounted for 33.0 percent of total motor gasoline sales, while oxygenated gasoline made up 3.1 percent of sales.

### *No. 2 Distillate*

Supported by many of the same factors that influenced prices for other products in the complex, the daily spot price for No. 2 heating oil at New York Harbor registered an appreciable increase during March. Opening at 56.8 cents per gallon, the price followed the upward pattern seen throughout the market. Prompted and supported by rising prices for crude oil and gasoline, the price for heating oil continued to rise through most of the month. After a slight downturn, the price closed March at 67.1 cents per gallon, more than 10 cents higher than when it started the month.

- No. 2 distillate prices rose in March. The national average residential price for No. 2 distillate increased 1.1 cents to \$1.097 per gallon, while the average wholesale price jumped 9.3 cents to 67.4 cents per gallon. The average price for No. 2 diesel fuel at company-operated retail outlets rose 8.5 cents, while the average wholesale price climbed 10.5 cents. The difference between low- and high-sulfur diesel fuel prices was 1.5 cents at retail and 2.8 cents at wholesale.
- Sales of No. 2 distillate by refiners fell again in March. Total sales declined 7.2 million gallons (4.9 percent), to 140.6 million gallons per day. Sales of No. 2 fuel oil fell 4.3 million gallons per day (12.5 percent), while sales of No. 2 diesel fuel declined 2.9 million gallons per day (2.6 percent). Low-sulfur diesel fuel accounted for 84.4 percent of all refiner diesel fuel sales, and 66.4 percent of all refiner No. 2 distillate sales.

## *Residual Fuel Oil*

- Refiner prices for residual fuel oil rose in March. Prices for low-sulfur residual fuel oil increased 2.0 cents to 53.2 cents per gallon at retail, and by 7.7 cents to 45.7 cents per gallon at wholesale. The average retail price for high-sulfur residual fuel oil rose 7.1 cents to 48.1 cents per gallon, while the wholesale price increased 9.4 cents to 43.1 cents per gallon. Including data reported by a sample of residual fuel oil marketers, the average low-sulfur residual fuel oil price increased 3.2 cents to 53.8 cents per gallon at retail, and by 5.9 cents to 46.0 cents per gallon at wholesale. The price for high-sulfur residual fuel oil climbed 6.2 cents to 47.5 cents per gallon at retail, and 6.6 cents to 41.6 cents per gallon at wholesale.
- Total refiner residual fuel oil sales rose modestly in March, increasing 300,000 gallons per day (1.6 percent), to 19.1 million gallons per day. Low-sulfur residual fuel sales increased 800,000 gallons per day

(10.4 percent), while high-sulfur residual fuel oil sales fell 600,000 gallons per day (5.4 percent).

## *Other Products*

- Overall, other surveyed products' prices increased during March. Refiner propane prices rose 4.4 cents per gallon at retail, and 3.3 cents per gallon at wholesale. Including data from a sample of propane marketers, the average residential propane price dropped 2.7 cents per gallon. The average retail price declined 1.3 cents, while the average wholesale price rose 3.2 cents. Prices for kerosene-type jet fuel, aviation gasoline, kerosene, No. 1 distillate, and No. 4 distillate prices increased at both levels.
- Refiner sales of propane, kerosene, No. 1 distillate, and No. 4 distillate declined at both retail and wholesale again in March. Aviation gasoline and kerosene-type jet fuel sales increased at both levels.